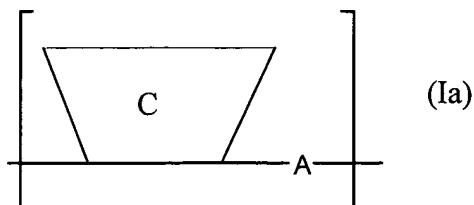
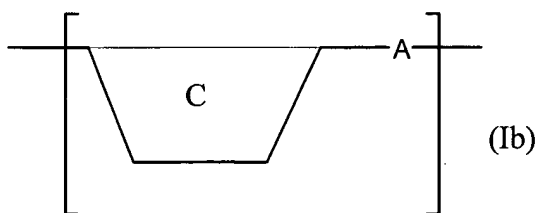


In the claims:

1. **(Currently Amended)** A water-soluble, linear cyclodextrin copolymer comprising repeating units of formula Ia, Ib or both ~~a combination thereof~~:



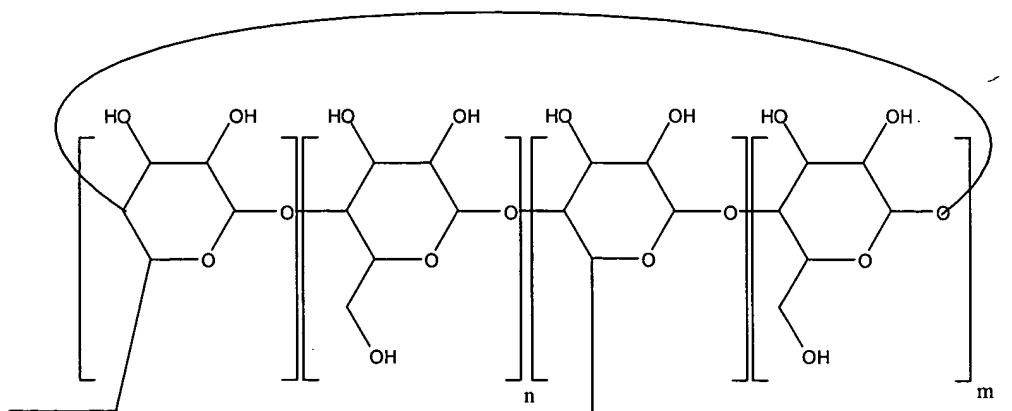
and



wherein C is a substituted or unsubstituted cyclodextrin monomer and A is a comonomer bound to cyclodextrin C.

2. **(Original)** A cyclodextrin copolymer of claim 1, wherein said cyclodextrin monomer is an α -, β -, or γ -cyclodextrin, or combination thereof.

3. **(Currently Amended)** A cyclodextrin copolymer of claim 1, wherein said cyclodextrin monomer has the general formula (II):



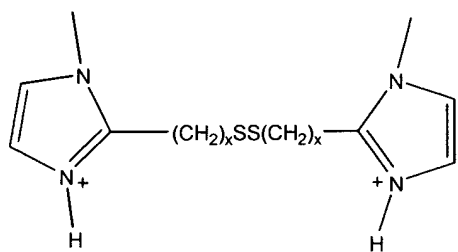
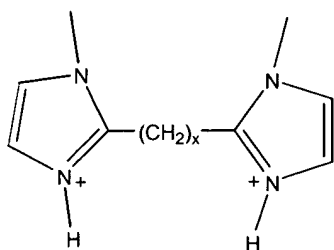
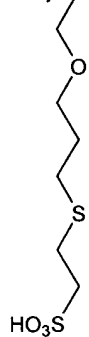
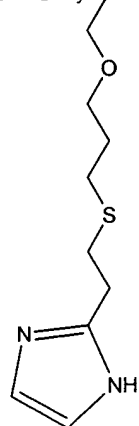
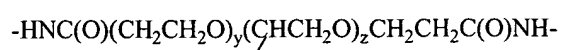
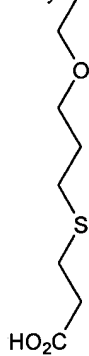
62 and is selected from the group consisting of: 6^A,6^B-deoxy- α -cyclodextrin (n=0, m=4), 6^A,6^C-deoxy- α -cyclodextrin (n=1, m=3), 6^A,6^D-deoxy- α -cyclodextrin (n=2, m=2), 6^A,6^B-deoxy- β -cyclodextrin (n=0, m=5), 6^A,6^C-deoxy- β -cyclodextrin (n=1, m=4), 6^A,6^D-deoxy- β -cyclodextrin (n=2, m=3), 6^A,6^B-deoxy- γ -cyclodextrin (n=0, m=6), 6^A,6^C-deoxy- γ -cyclodextrin (n=1, m=5), 6^A,6^D-deoxy- γ -cyclodextrin (n=2, m=4), and 6^A,6^E-deoxy- γ -cyclodextrin (n=3, m=3).

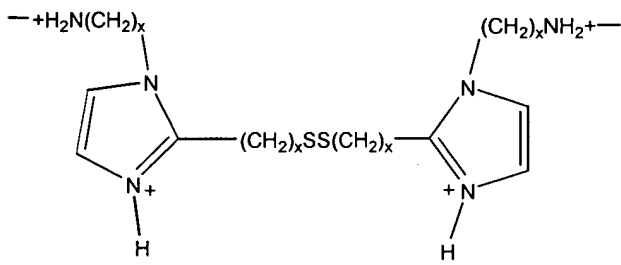
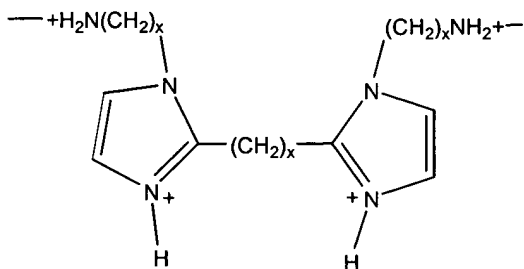
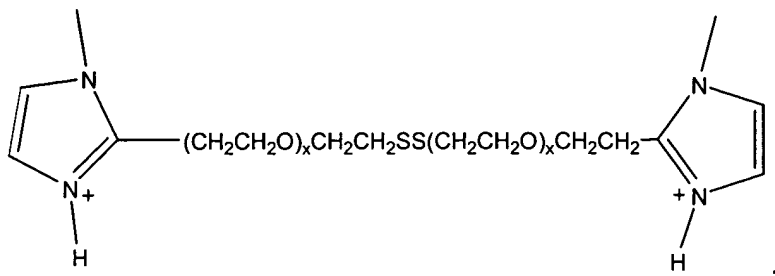
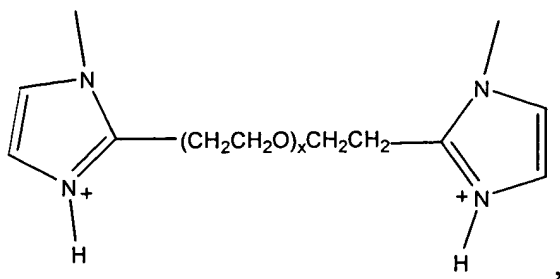
Claims 4 and 5 (Cancelled).

6. **(Currently Amended)** A cyclodextrin copolymer of claim 1, wherein A is a protonated or non-protonated comonomer selected from the group consisting of:

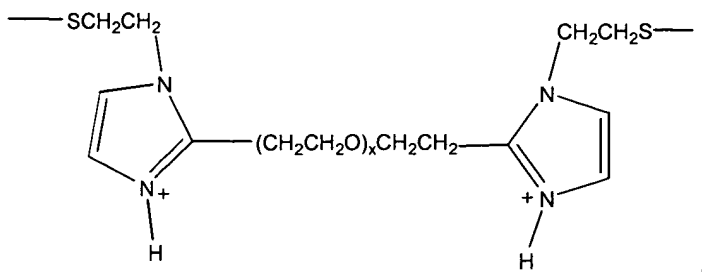
63
 -HNC(O)(CH₂)_xC(O)NH-, -HNC(O)(CH₂)_xSS(CH₂)_xC(O)NH-,
 -⁺H₂N(CH₂)_xSS(CH₂)_xNH₂⁺-, -HNC(O)(CH₂CH₂O)_xCH₂CH₂C(O)NH-,
 -HNNHC(O)(CH₂CH₂O)_xCH₂CH₂C(O)NHNH-,
 -⁺H₂NCH₂(CH₂CH₂O)_xCH₂CH₂CH₂NH₂⁺-,
 -HNC(O)(CH₂CH₂O)_xCH₂CH₂SS(CH₂CH₂O)_xCH₂CH₂C(O)NH-,
 -HNC(NH₂⁺)(CH₂CH₂O)_xCH₂CH₂C(NH₂⁺)NH-,
 -SCH₂CH₂NHC(NH₂⁺)(CH₂)_xC(NH₂⁺)NHCH₂CH₂S-,
 -SCH₂CH₂NHC(NH₂⁺)(CH₂)_xSS(CH₂)_xC(NH₂⁺)NHCH₂CH₂S-,
 -SCH₂CH₂NHC(NH₂⁺)CH₂CH₂(OCH₂CH₂)_xC(NH₂⁺)NHCH₂CH₂S-,
 -HNC(O)(CH₂CH₂O)_y(CHCH₂O)_zCH₂CH₂C(O)NH-







and



wherein $x = 1-50$ and $y+z=x$.

7. **(Original)** A cyclodextrin copolymer of claim 1, wherein A is biodegradable or acid-labile.

8. (Original) A cyclodextrin copolymer of claim 1, wherein the cyclodextrin copolymer is crosslinked to a polymer.

9. (Currently Amended) A cyclodextrin copolymer of claim 8, wherein the polymer further comprises at least one ligand is bound to the linear cyclodextrin copolymer, whereby said ligand allows the therapeutic agent to target or bind to a cell.

10. (Currently Amended) A cyclodextrin copolymer of claim 1, wherein the polymer further comprises at least one ligand is bound to the linear cyclodextrin copolymer, whereby said ligand allows the therapeutic agent to target or bind to a cell.

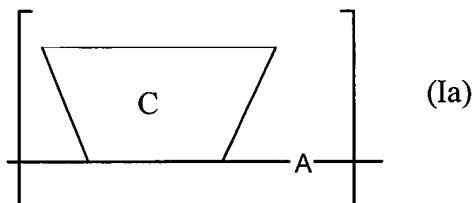
Claims 11-17 (Cancelled).

18. (Previously Amended) A therapeutic composition comprising a cyclodextrin copolymer of claim 1, 8, 9, or 10 and a therapeutic agent.

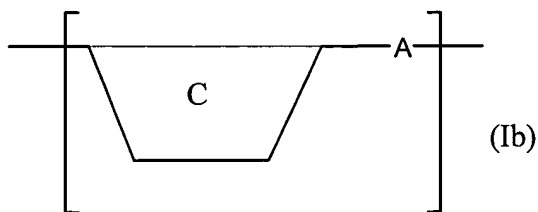
Claims 19-23 (Cancelled).

24. (Currently Amended) A method of preparing a linear cyclodextrin copolymer, comprising ~~the steps of~~:

copolymerizing a cyclodextrin monomer precursor, where said cyclodextrin comonomer precursor is disubstituted with the same or different leaving group, with a comonomer A precursor capable of displacing said leaving groups to form a linear cyclodextrin copolymer having repeating units of formula Ia, Ib, or a combination thereof:

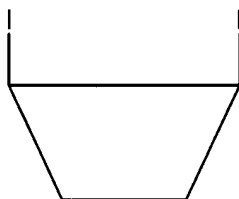
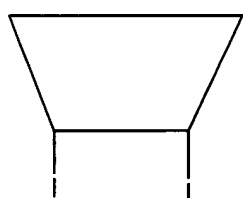


and

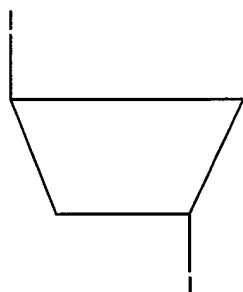


wherein C is a substituted or unsubstituted cyclodextrin monomer and A is a comonomer bound to cyclodextrin C.

25. **(Currently Amended)** A method of preparing a water-soluble, linear cyclodextrin copolymer of claim 24, wherein said disubstituted cyclodextrin monomer precursor is a diiodinated cyclodextrin monomer precursor of formula IVa, IVb, IVc or a mixture thereof:



and



26. **(Original)** A method of claim 24, wherein said cyclodextrin monomer C is an α -, β -, or γ -cyclodextrin, or combination thereof.

Claims 27-29 (Cancelled).

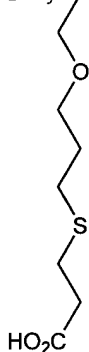
30. **(Currently Amended)** A method of claim 24, wherein A is a protonated or non-protonated comonomer selected from the group consisting of:

-HNC(O)(CH₂)_xC(O)NH-, -HNC(O)(CH₂)_xSS(CH₂)_xC(O)NH-,
 -⁺H₂N(CH₂)_xSS(CH₂)_xNH₂⁺-, -HNC(O)(CH₂CH₂O)_xCH₂CH₂C(O)NH-,

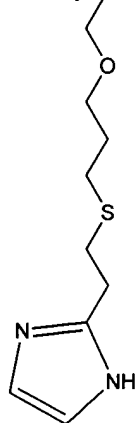
$\text{-HNNHC(O)(CH}_2\text{CH}_2\text{O)}_x\text{CH}_2\text{CH}_2\text{C(O)NHNH-}$,
 $\text{-}^+\text{H}_2\text{NCH}_2(\text{CH}_2\text{CH}_2\text{O)}_x\text{CH}_2\text{CH}_2\text{CH}_2\text{NH}_2^+\text{-}$,
 $\text{-HNC(O)(CH}_2\text{CH}_2\text{O)}_x\text{CH}_2\text{CH}_2\text{SS(CH}_2\text{CH}_2\text{O)}_x\text{CH}_2\text{CH}_2\text{C(O)NH-}$,
 $\text{-HNC(NH}_2^+\text{)(CH}_2\text{CH}_2\text{O)}_x\text{CH}_2\text{CH}_2\text{C(NH}_2^+\text{)NH-}$,
 $\text{-SCH}_2\text{CH}_2\text{NHC(NH}_2^+\text{)(CH}_2\text{)}_xC(\text{NH}_2^+)\text{NHCH}_2\text{CH}_2\text{S-}$,
 $\text{-SCH}_2\text{CH}_2\text{NHC(NH}_2^+\text{)(CH}_2\text{)}_x\text{SS(CH}_2\text{)}_xC(\text{NH}_2^+)\text{NHCH}_2\text{CH}_2\text{S-}$,
 $\text{-SCH}_2\text{CH}_2\text{NHC(NH}_2^+\text{)CH}_2\text{CH}_2(\text{OCH}_2\text{CH}_2\text{)}_xC(\text{NH}_2^+)\text{NHCH}_2\text{CH}_2\text{S-}$,
 $\text{-HNC(O)(CH}_2\text{CH}_2\text{O)}_y(\text{CHCH}_2\text{O)}_z\text{CH}_2\text{CH}_2\text{C(O)NH-}$

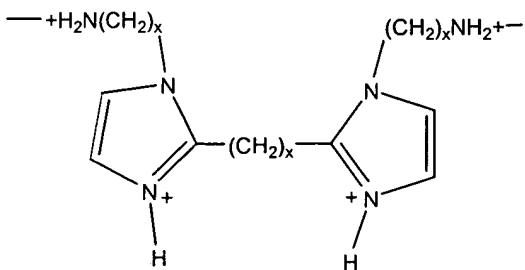
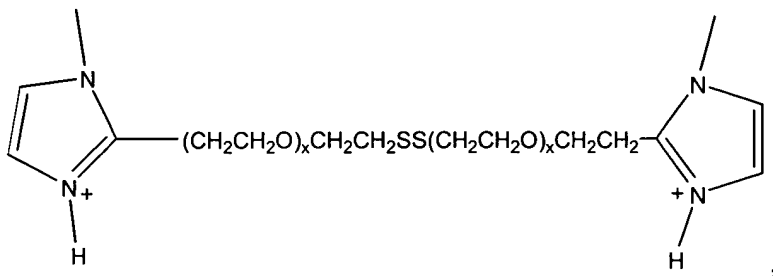
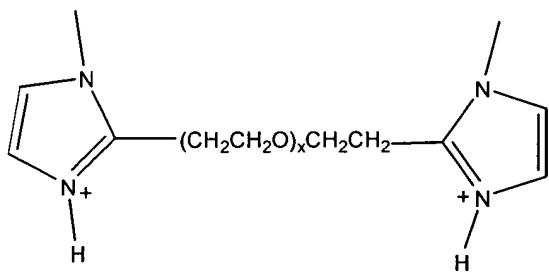
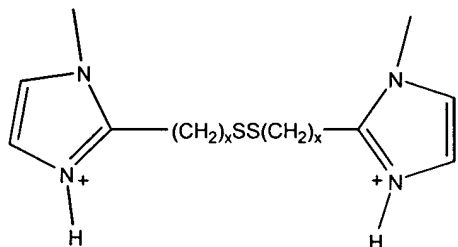
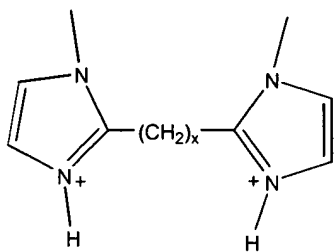
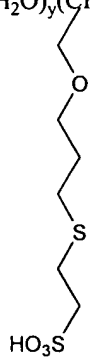
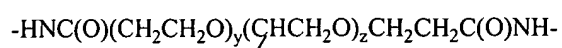


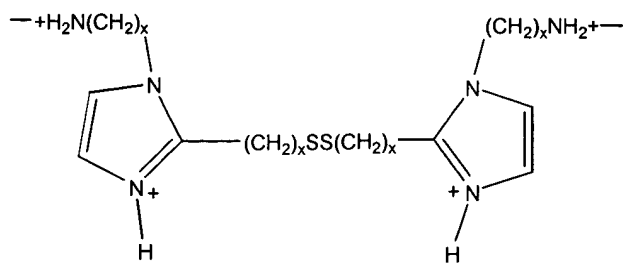
$\text{-HNC(O)(CH}_2\text{CH}_2\text{O)}_y(\text{CHCH}_2\text{O)}_z\text{CH}_2\text{CH}_2\text{C(O)NH-}$



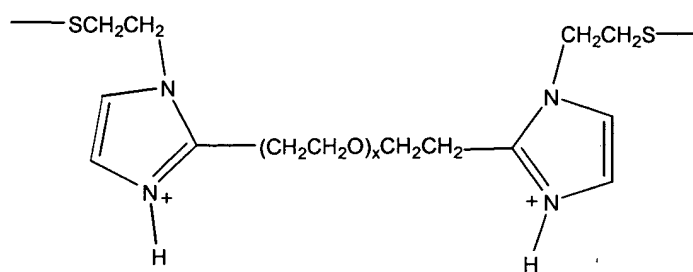
$\text{-HNC(O)(CH}_2\text{CH}_2\text{O)}_y(\text{CHCH}_2\text{O)}_z\text{CH}_2\text{CH}_2\text{C(O)NH-}$







and

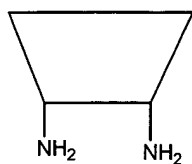


wherein $x = 1-50$ and $y+z=x$.

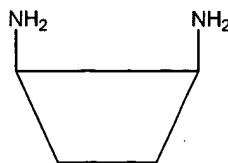
31. **(Currently Amended)** A method of claim 24, further comprising ~~the step of~~ reacting said linear cyclodextrin copolymer with a ligand to form a linear cyclodextrin copolymer having at least one ligand bound to the copolymer, whereby said ligand allows the therapeutic agent to target or bind to a cell.

32. **(Currently Amended)** A method of claim 25, further comprising ~~the step of~~ aminating said diiodinated cyclodextrin monomer precursor to form a diaminated cyclodextrin comonomer precursor; and copolymerizing said diaminated cyclodextrin comonomer precursor to form said cyclodextrin copolymer having repeating units of formula Ia, Ib, or a combination thereof.

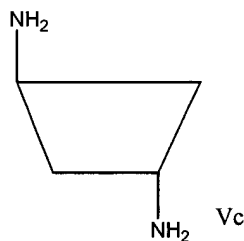
33. **(Currently Amended)** A method of claim 32, wherein said diaminated cyclodextrin monomer precursor is has a structure of formula Va, Vb, Vc or a mixture thereof:



Va ,

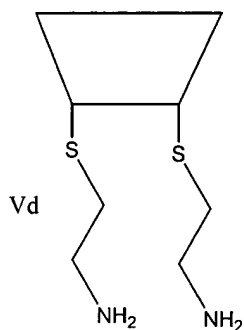


Vb , and



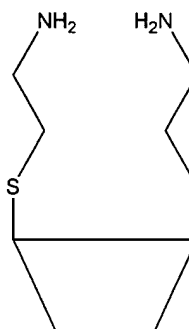
Vc

34. (Currently Amended) A method of claim 32, wherein said diaminated cyclodextrin monomer precursor has a structure is of formula Vd, Ve, Vf or a mixture thereof:



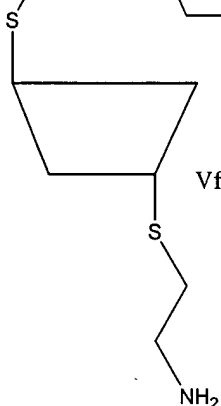
Vd ,

NH₂



Ve ,

and



Vf

NH₂

Lee
05/08/03

Claims 35-⁴³~~34~~ (Cancelled).

67 44. (Currently Amended) A method of delivering a therapeutic comprising the step of administering a therapeutically effective amount of a therapeutic composition of claim 18.

Claim 45 (Cancelled).

68 46. (Currently Amended) A method of delivering a therapeutic agent comprising the steps of:

combining a cyclodextrin copolymer of any of claims 1, 8, 9, or 10 with a therapeutic agent to form a mixture; and
allowing said mixture to self-assemble to form an associated composition; and
administering a therapeutically effective amount of said associated composition to a subject in need of said therapeutic agent.

69 47. (New) A water-soluble, linear cyclodextrin polymer produced by a method comprising:

- a) providing at least one cyclodextrin derivative modified to bear one reactive site at each of exactly two positions; and
- b) reacting the cyclodextrin derivative with a linker having exactly two reactive moieties capable of forming a covalent bond with the reactive sites under polymerization conditions that promote reaction of the reactive sites with the reactive moieties to form covalent bonds between the linker and the cyclodextrin derivative,

whereby a linear polymer comprising alternating units of cyclodextrin derivatives and linkers is produced.

59 48. (New) A water-soluble, linear cyclodextrin polymer having a linear polymer backbone, which polymer comprises a plurality of substituted or unsubstituted cyclodextrin moieties and linker moieties in the linear polymer backbone, wherein each of the cyclodextrin moieties, other than a cyclodextrin moiety at the terminus of a polymer chain, is attached to two of said linker moieties, each linker moiety covalently linking two cyclodextrin moieties.

69/49. (New) A water-soluble, linear cyclodextrin polymer comprising a plurality of cyclodextrin moieties covalently linked together by a plurality of linker moieties, wherein each cyclodextrin moiety, other than a cyclodextrin moiety at the terminus of a polymer chain, is attached to two linker moieties to form a linear cyclodextrin polymer.

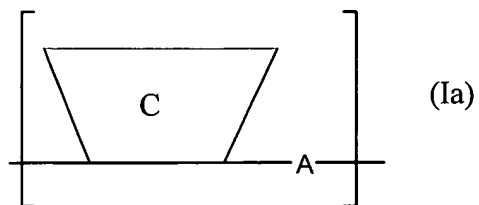
61/50. (New) A purified water-soluble, linear cyclodextrin polymer produced by a method comprising:

- a) providing at least one cyclodextrin derivative modified to bear one reactive site at each of exactly two positions;
- b) reacting the cyclodextrin derivative with a linker having exactly two reactive moieties capable of forming a covalent bond with the reactive sites under polymerization conditions that promote reaction of the reactive sites with the reactive moieties to form covalent bonds between the linker and the cyclodextrin derivative, whereby a water-soluble, linear polymer comprising alternating units of cyclodextrin derivatives and linkers is produced; and
- c) purifying the water-soluble, linear polymer.

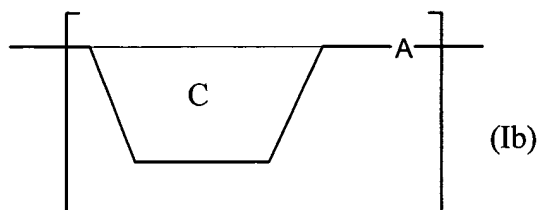
69 62/51. (New) A purified water-soluble, linear cyclodextrin polymer having a linear polymer backbone, which polymer comprises a plurality of substituted or unsubstituted cyclodextrin moieties and linker moieties in the linear polymer backbone, wherein each of the cyclodextrin moieties, other than a cyclodextrin moiety at the terminus of a polymer chain, is attached to two of said linker moieties, each linker moiety covalently linking two cyclodextrin moieties.

63/52. (New) A purified water-soluble, linear cyclodextrin polymer comprising a plurality of cyclodextrin moieties covalently linked together by a plurality of linker moieties, wherein each cyclodextrin moiety, other than a cyclodextrin moiety at the terminus of a polymer chain, is attached to two linker moieties to form a linear cyclodextrin polymer.

u/53. (New) A purified water-soluble, linear cyclodextrin copolymer comprising repeating units of formula Ia, Ib, or both:



and



wherein C is a substituted or unsubstituted cyclodextrin monomer and A is a linker that covalently links two cyclodextrin moieties together in the polymer backbone, wherein each C is attached to at most two occurrences of A.